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FOR THE ALERT

THE AEROPLANE SPOTTER

3D WEEKLY

EVERY THURSDAY

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THE BULLETIN OF THE OBSERVER CORPS CLUB
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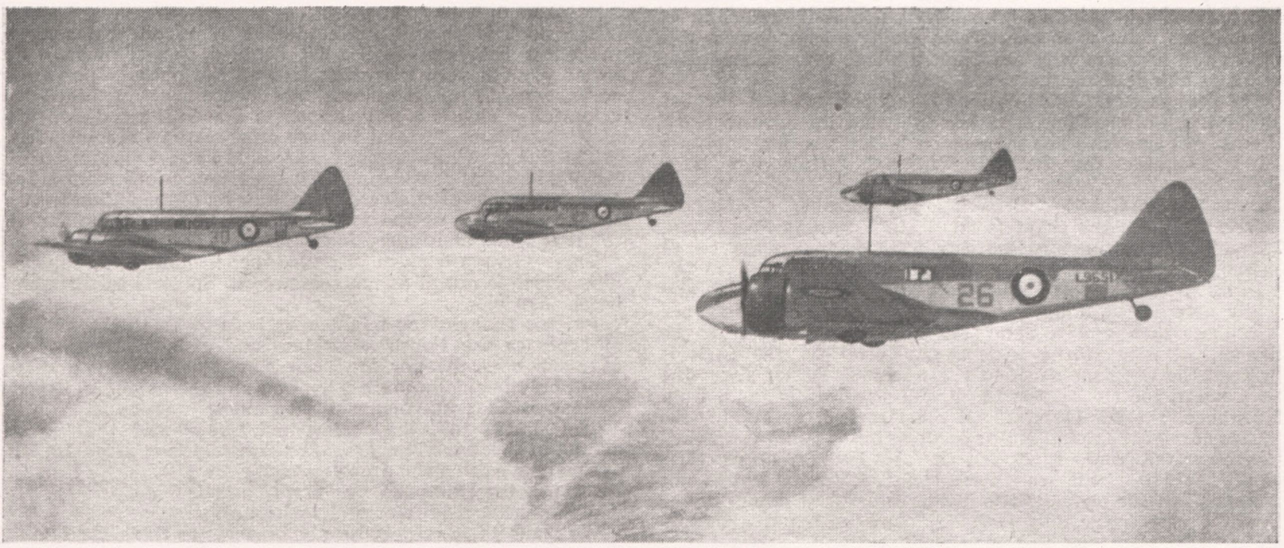


ACCENT ON TRAINING.—AIRSPEED OXFORD TWO-MOTOR ADVANCED TRAINERS OF THE R.A.F.

ONE OF the most encouraging indications of enthusiasm and of keenness among Observers to become skilled in aircraft identification has been the spontaneous movement which led to the founding and growth of the Hearkers' Clubs throughout the Observer Corps.

The first Hearkers' Club was founded by Members of the Observer Corps at Guildford in November, 1939. Its objects were both serious and social. Most of all it was intended to afford opportunity for the mutual study of aircraft recognition and the promotion of efficiency in that art. It sprang directly from the need for training, and it expressed an involuntary and probably unconscious criticism of official neglect in this respect. It owed its birth to and derived most of its vitality from the enterprise of Mr. H. James Lowings, who fortunately is still able to guide and advise the movement in its expanded form.

The idea proved so attractive to the keen members of the Observer Corps that other districts followed the example of Guildford, until at the end of the first year of its existence the Hearkers' Club had 15 separate Branches in England, Scotland and Wales, and something like 100 more were in prospect.

Obviously the movement had outgrown the original plans, which were conceived on a purely local basis. For that reason the Hearkers' Club is now reconstituted on a National scale with the encouragement and support of the Air Ministry and the Headquarters of the Observer Corps. The old name, which was attractive as a purely local affair (it arose through a rural reference to one of the Observers as being "out an' 'earkin"), is now being superseded by the more explanatory title of THE OBSERVER CORPS CLUB, and a new, legally sound and eminently democratic constitution has been drawn up.

Thus has private initiative led the way and demonstrated how the sadly neglected study of aircraft recognition should have been organized from the start. The standard laid down as the minimum required for any efficient Observer and embodied in the Third Grade test of the Club is likely to become the acknowledged basis for all Spotters throughout the country.

Under the new scheme of THE OBSERVER CORPS CLUB every post will be officially encouraged to form a Study Circle and every three or four posts to band together to form a Branch of the Club. We would urge the Air Ministry to make full use of this organization and through this system to ensure that every member of the Observer Corps possesses at least the minimum standard of qualifications. We hope, too, that the Ministry will ultimately require every Observer to hold a certificate of THE OBSERVER CORPS CLUB, as proof of proficiency.

There still seems to be room for a more general body for the study of aircraft recognition among Spotters not in the Observer Corps. This week we have received news of the formation of Spotters' Club No. 1 (Southend-on-Sea) founded on the lines of the Hearkers' Club and intended for roof watchers in the district. If this movement grows on the right lines "Spotters' Clubs," might become affiliated to THE OBSERVER CORPS CLUB with the object of promoting a common cause and aiming at a common standard of proficiency.

NEWS OF THE WEEK

TWO BOOKS FOR SPOTTERS

THE SPOTTER'S HANDBOOK.—By Francis Chichester. 7½ ins. by 5 ins. 149 pp., 45 pp. of drgs. Published by George Allen and Unwin, Ltd. Jan. 16, 1941. Price 5s.

MR. CHICHESTER has always been adventurous. After a few hours of solo flying he flew to Australia by himself—and got there. Now, after only a few months of spotting he has written a book for Spotters—and got there again.

In general this book is excellent and one to be recommended to all concerned in aircraft recognition. In detail there are a number of lesser howlers which should be noted. Mr. Chichester has told us himself that he gets a great kick out of being the first to do something. We herewith deliver a kick to him for being the first person to look at a photograph of a Harvard and solemnly decide that the triangle of gas detector paint near the tail is " a notch out of the tail root " and a worthy identification point. We have discussed the point with him and, unabashed, he offers the suggestion that if the colour of the anti-gas paint is so effective in giving an impression of a gap in the fuselage, why not paint a whole aeroplane in that way and hide it altogether!

The best part of " The Spotter's Handbook " is that devoted to the duties of the Spotter rather than that intended to teach aircraft recognition. The sections on " Outlines of a Spotter's Job," " Gunfire the Best Indication," " How Far is a Shell Burst?" " Which Way is it Going?" " What Safety Margin has he Got?" " Behaviour of Bombs," " Bombing Behaviour," and the chapters on " The Spotter's Post " and " Organisation of Factory Spotting " are the best we have read on the subject.

In his sections devoted to aircraft recognition Mr. Chichester boldly accepts the dangers of generalisation. For instance " a blunt nose and a blunt tail are almost certain to be British," " Any 'plane with a gun-turret on the back is British ; the Germans never fit them there " (What about the Fw Condor, the Do 24, the Ju 89, the new Do 217, and, from a distance, the He 111K?). Of the Harvard, he says: " the square nose of the radial motor ensures that it is not German " (there are the Arado types and the new Focke-Wulf fighter); of the Me 110 " the wing resembles the Me 109 but is not ' clipped ' at the ends " (it is just as square-cut now) ; of the Do 17 " this is the only German 'plane with radial motors likely to be seen over this country." (Many types are now being re-engined with the new B.M.W. radial.)

Generalisations are always dangerous in aircraft recognition. Aircraft design moves so fast that trends may alter in a few weeks. But there is so much sound common sense in Mr. Chichester's book that we recommend it to every Spotter wherever he is engaged. Everyone will learn something from it.—P.G.M.

AIRCRAFT OF THE FIGHTING POWERS. Compiled by H. J. Cooper and O. G. Thetford. Edited by D. A. Russell. 11¼ ins. by 8¾ ins. 174 pp.; 90 phgs., 42 single-page drgs., 40 double-page drgs., 5 treble-page drgs. Published by The Harborough Publishing Co. Ltd. Price 10s. 6d.

THIS book contains photographs, line drawings and details of **89** aeroplanes of eight different nations. It is beautifully produced on art paper and obviously an immense amount of painstaking research has gone into its preparation. The result is the best book of its sort which has yet appeared. The drawings are generally accurate and on a uniform and generously large scale of **6** ft. to **1** in. (**1/72** scale). The descriptive matter is neatly planned and well presented and contains all the essential information about each type together with a brief historical record. The presentation suggests that the compilers are meticulous readers and researchers of THE AEROPLANE.

The book is so well produced that we regret that some of the effect has been spoiled by detailed shortcomings. For instance, with very few exceptions all the photographs are of early versions of the aeroplanes concerned, in peace-time colouring. This is a pity, since the drawings are designed to assist model makers and various cross-sections are included.

The line drawings themselves are bold but are extraordinarily lacking in detail considering their scale. A curious point is that far less care has been given to the drawing of the undercarriages than to the rest of the machines, and in some instances the result is crude and indeed inaccurate.

Three views are given of each type, including the top plan view which is not of as much service to Spotters as the underneath plan view.

Further thought too might have been given to the selection of types as the Polish aeroplanes and Belgian are not now of much concern, nor are such aeroplanes as the S.M.79B (used only in small numbers by Iraq and the Argentine) or the German Bücker Jungmann initial trainer.

The Martin **167**, the " Maryland," is named the " Baltimore " in this book in error. The Baltimore is the Martin **187**.

In a new edition the drawings of the Me **110**, the Ju **87B**, the He **111K**, the Hampden, the Do **17** and Do **215**, the He **113**, and the Ju **88** require careful revision.

We make these criticisms only because we think the book is so good that it should be complete in every respect. We know how difficult this business is and we congratulate the compilers on a fine effort. With the reservations mentioned we recommend this book to all studious Spotters. Certainly every Branch of the Observer Corps Club and every recognition school should have a copy. But most of all it will appeal to the model maker.—P.G.M.

WEEKLY NOTES FOR SPOTTERS—VI

By R. A. Saville-Sneath

(Member of the Observer Corps and a Founder Member of the Hearkers' Club)

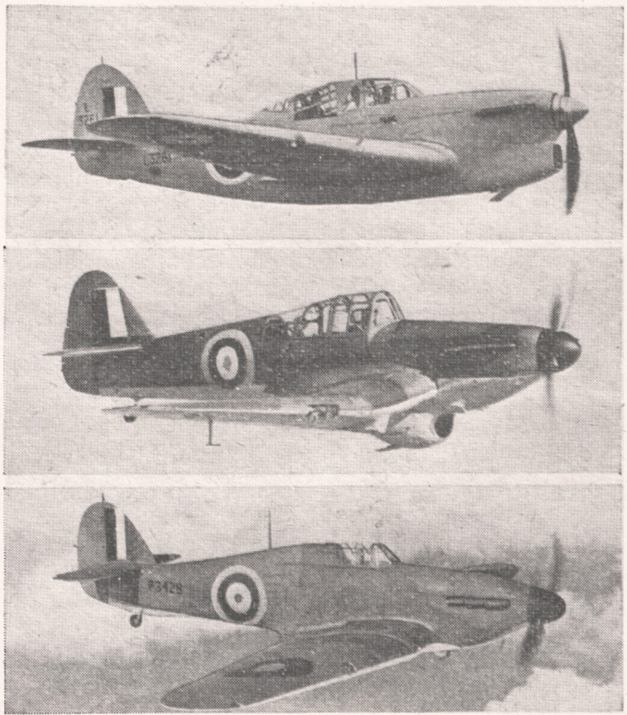
(Two weeks ago Mr. Saville-Sneath discussed possible confusion between the Henley, Hurricane and Master. The concluding part of that article appears below.)

THE centre section of the wing of the Hurricane is without taper for a distance which is approximately equal to the chord at the wing roots. This forms an almost perfect square from the corners of which the taper begins on the leading edge and trailing edge. In contrast, the taper of the wing of the Henley is continuous from the fuselage to the wing-tips.

In the head-on view, observation of this short, straight centre section of the Hurricane wing is again useful, for the slight dihedral angle starts at the same point as the taper. The equally slight dihedral of the Henley runs continuously from the fuselage to the wing-tips. The deep, " built-in " radiator adds distinctiveness to the head-on view of the Henley, giving the fuselage an unusually deep and somewhat slab-sided appearance in marked contrast to the oval-section fuselage of the Hurricane.

Slab-sided, by the way, is a convenient term which tends to be overworked in describing aircraft—so much so that in the early days of the Hearkers' instructional meetings, beginners assumed that it had a purely aeronautical sense and included it with other terms requiring definition. Elsewhere I have defined it as a " self-explanatory " term applied to the type of fuselage which although not fully rectangular in section has flat sides.

Having just come across the term applied by an American writer to bears after their long winter fast—" . . . the bears came out of their dens, slab-sided and light "—I am not without hope that the adjective may one day be applied with literal accuracy to Göring's famous fuselage.



[" *Aeroplane* " photograph

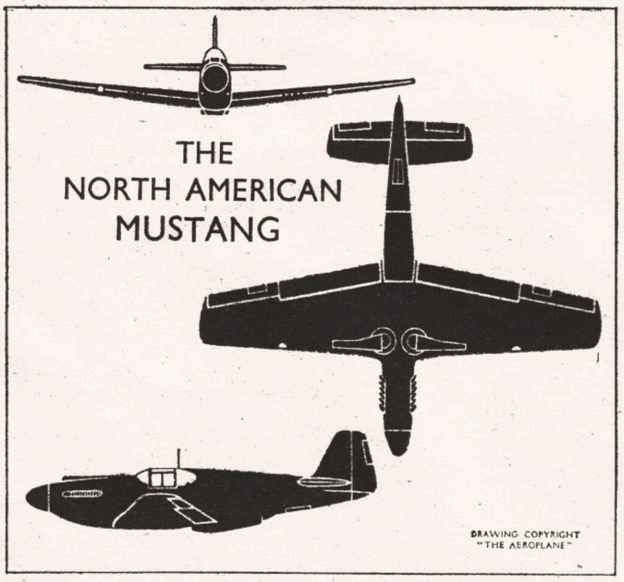
THREE FINE TYPES.—(Top to bottom) The Hawker Henley (1,030 h.p. Rolls-Royce Merlin II) : the Miles Master (715 h.p. Rolls-Royce Kestrel XXX) : the Hawker Hurricane (1,030 h.p. Rolls-Royce Merlin II).

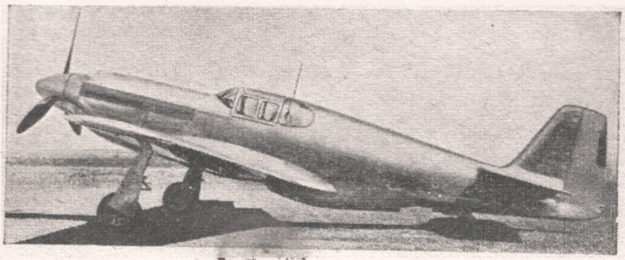
AIRCRAFT IN THE NEWS—VI

THE NORTH AMERICAN N.A.73 MUSTANG

AMERICA'S newest single-seat fighter for the Royal Air Force, the North American Mustang, is now in quantity production and deliveries will begin soon.

The Mustang is a slim low-wing monoplane with square-cut wings which are uncomfortably like those of the Messerschmitt Me 109 from the Spotters' point of view. Construction is entirely of metal, with stressed metal covering. The undercarriage retracts inwards into " Mae West " cowls under the centre section in the same manner as that of the Harvard. The tail wheel is fully retractable.





The Mustang is powered with a 1,150 h.p. Allison V-1710-F3R liquid-cooled motor, which is neatly cowled into the nose. It drives a three-blade constant-speed airscrew. The long ducted radiator is beneath the fuselage behind the pilot's cockpit. Two fuel tanks, with a total capacity of 141 Imp. gallons, are built into the wing structure. The 10-gallon oil tank is immediately behind the motor.

The pilot's cockpit is completely enclosed and is hinged to open in the same manner as the Me 109. There is a door on the port side.

The armament appears to be eight machine guns, three in each wing and two in the fuselage at the wing roots. The top speed is not released, but appears likely to be around 400 m.p.h. The wing area is about the same as that of the Spitfire III and hence the wing loading is fairly high—32.8 lb. per sq. ft.

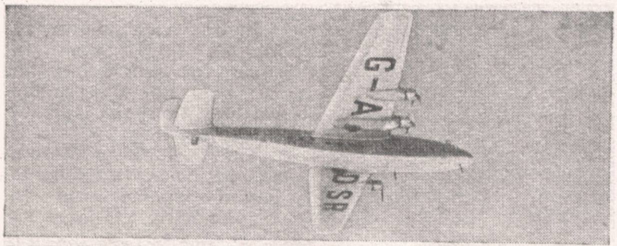
DIMENSIONS.—Span, 37 ft. $0\frac{5}{16}$ in.; length, 32 ft. $2\frac{5}{8}$ ins.; height, 8 ft. 8 ins.; wing area, 235.75 sq. ft. Aspect ratio, 5.8. Airscrew diameter, 10 ft. 6 ins. Track, 11 ft. 10 ins.

WEIGHTS.—Empty, 5,990 lb.; loaded, 7,708 lb.

POINTS OF RECOGNITION.—Straight tapered low wings with almost square-cut tips. Long pointed nose. Tailplane on top of fuselage in front of angular single fin and rudder. Radiator beneath fuselage behind wing. Inwards retracting undercarriage. Retractable tail wheel.

CIVIL IDENTIFICATION—VI

THE ARMSTRONG WHITWORTH A.W.27, THE ENSIGN



GREAT BRITAIN'S biggest transport landplane, the Armstrong Whitworth A.W. 27, the Ensign (four 935 h.p. Armstrong Siddeley Tiger IX motors), was first flown on Jan. 24, 1938. Imperial Airways ordered 14 for the European and Empire routes, before the War. Because the nautical pronunciation " Ensun " has led to confusion with "Anson," the full phonetic value of the syllable " sign " should be given.

The first Ensigns went into service on the Paris Route in the Summer of 1938 but were withdrawn at the beginning of 1939 for modifications to the motors and airframes. They went back into service in June that year with the 880 h.p. Tiger IX motors boosted to 935 h.p. for take-off. They continued in service on the Paris Routes until the collapse of France last year and were used also for carrying food and ammunition to the troops in Belgium. The ten still in existence are now used for communications duties.

Ensigns were to have been fitted with 1,100 h.p. Wright Cyclone motors which had been ordered from the United States.

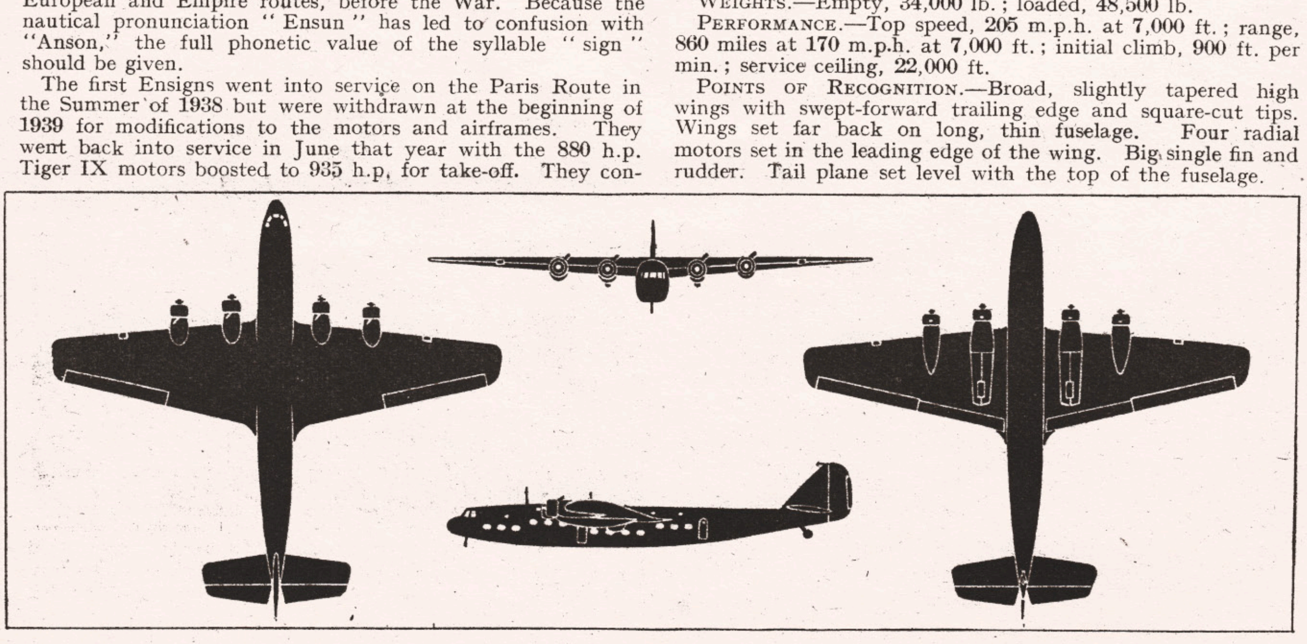
The Ensign is a high wing cantilever monoplane with tapered wings of low aspect ratio and long cylindrical fuselage. It has a big single fin and rudder. The undercarriage retracts backwards and upwards into fairings behind the inboard motors. The Ensigns are of all-metal construction and covering except for that part of the wing behind the spar and for the control surfaces, which have fabric covering.

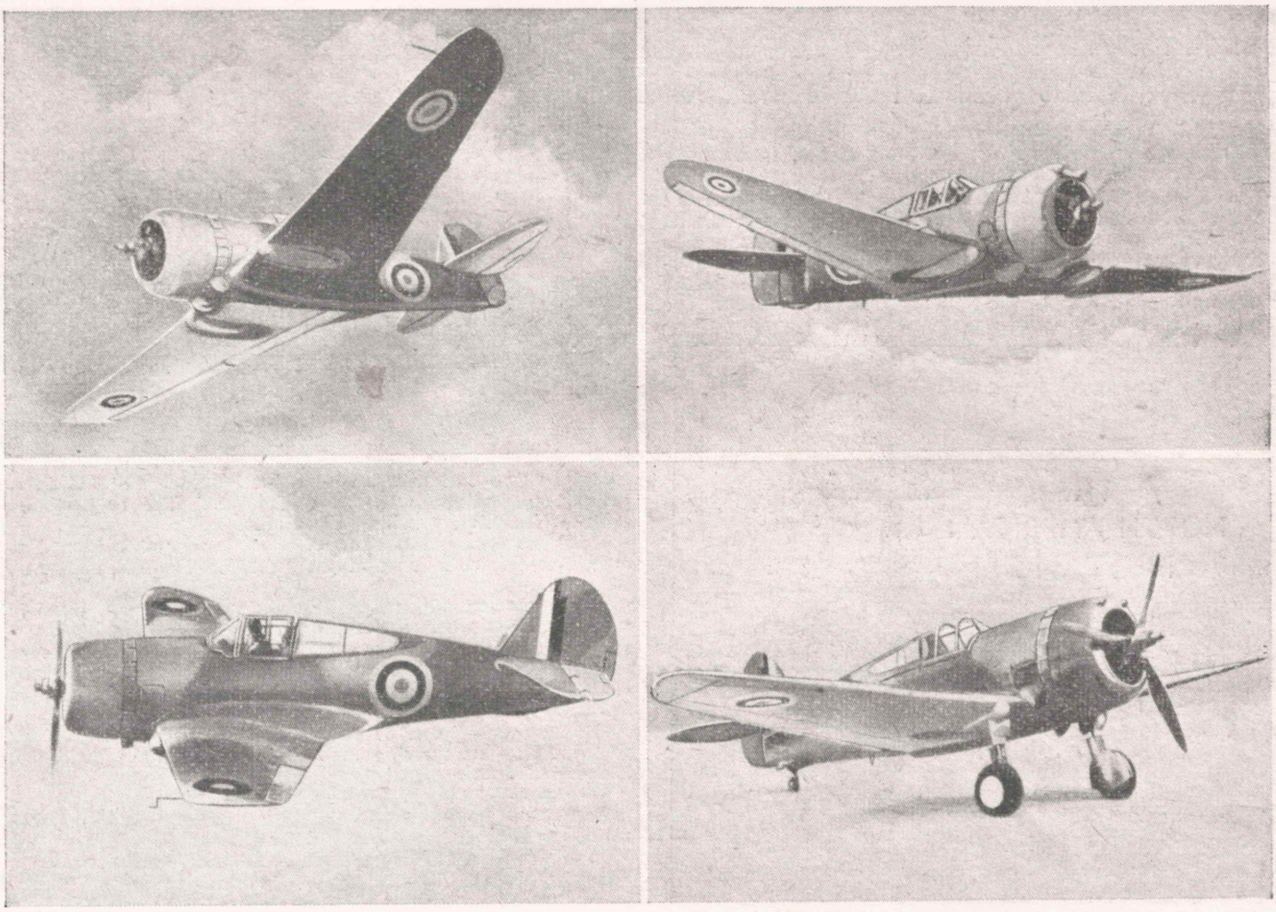
DIMENSIONS.—Span, 123 ft.; length, 110 ft.; height, 23 ft.; wing area, 2,443 sq. ft.; aspect ratio, 6.2.

WEIGHTS.—Empty, 34,000 lb.; loaded, 48,500 lb.

PERFORMANCE.—Top speed, 205 m.p.h. at 7,000 ft.; range, 860 miles at 170 m.p.h. at 7,000 ft.; initial climb, 900 ft. per min.; service ceiling, 22,000 ft.

POINTS OF RECOGNITION.—Broad, slightly tapered high wings with swept-forward trailing edge and square-cut tips. Wings set far back on long, thin fuselage. Four radial motors set in the leading edge of the wing. Big single fin and rudder. Tail plane set level with the top of the fuselage.



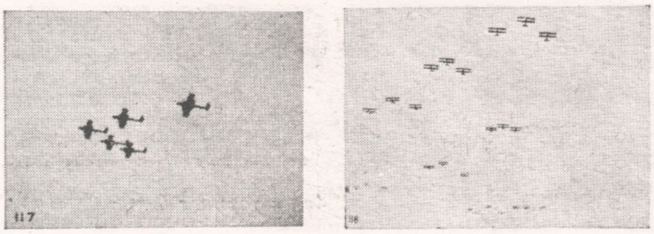


THE MOHAWK.—Inherited from the French, the Curtiss Hawk 75-A, designated the P-36 by the U.S. Army, is named the Mohawk by the R.A.F. It is in service with both Pratt and Whitney Twin Wasp and Wright Cyclone motors, but has not yet been in action with the R.A.F. The top speed is 323 m.p.h.

Aircraft Recognition

FORMATIONS of Handley Page Heyfords (two 695 h.p. Rolls-Royce Kestrel VI motors) and of de Havilland D.H. 82A Tiger Moths (one 130 h.p. D.H. Gipsy Major motor) were last week's recognition tests.

Some of the elderly Heyford biplanes are still in service for transport and experimental work. Their chief feature is that the fuselage is attached directly to the upper wing, leaving a large gap between the fuselage and the bottom wing. Thus the Heyford has the appearance of flying inverted. The spatted wheels are attached directly to the bottom wing with no visible undercarriage legs. The bottom centre-section plane is of thick section.

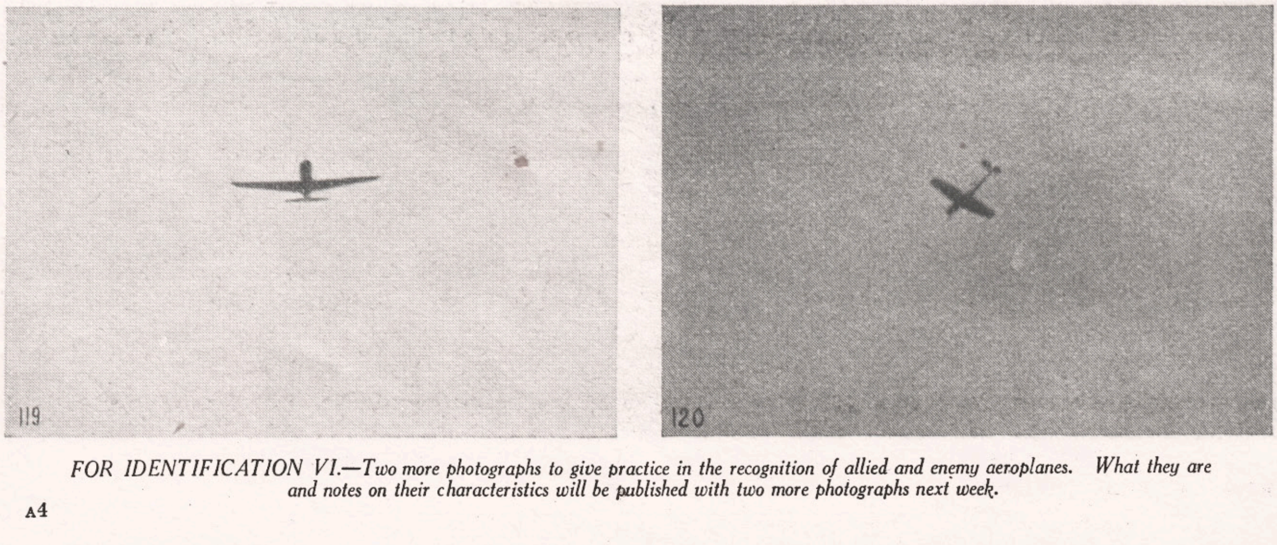


LAST WEEK'S PROBLEM.—(Left) H.P. Heyfords and (right) D.H. Tiger Moths.

In the view shown the long slab-sided fuselage, the square cut wing tips and the tall twin fins and rudders half-way along the tailplane, betray the identity.

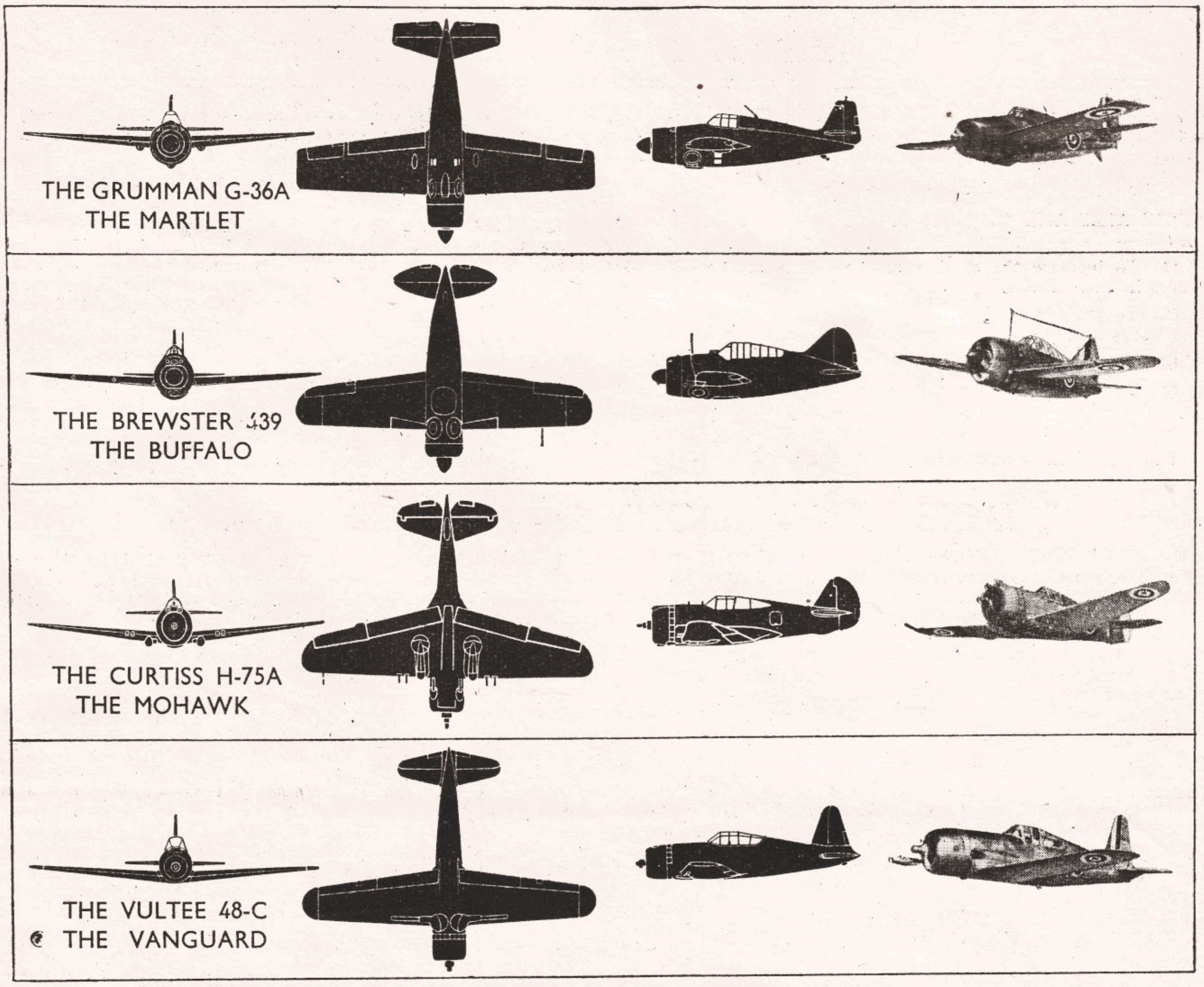
The D.H. Tiger Moth is an orthodox single-motor braced biplane. In the head-on view the large gap between the mainplanes is a prominent feature. From slightly below, the sweep back and stagger of the wings is characteristic as is the elliptical tailplane, cut away at the trailing edge for the rudder.

No biplanes are now included in the Third Grade tests of the Observer Corps Club but they are retained in the tests for the higher grades.



FOR IDENTIFICATION VI.—Two more photographs to give practice in the recognition of allied and enemy aeroplanes. What they are and notes on their characteristics will be published with two more photographs next week.

AIRCRAFT COMPARISON—VI



FOUR OF A KIND.—These American single-seat fighters with radial motors are all in service with the Royal Air Force. Confusion is easy.

THE SPOTTER'S GLOSSARY OF AERONAUTICAL TERMS

AUTOMATIC MIXTURE CONTROL.—A device which automatically adjusts the fuel mixture fed to an aero-motor so that the quantities of air and fuel are varied by a predetermined amount with increase in height.

AUTOMATIC PARACHUTE.—A parachute which is opened by a static line attached to an aerostat or aerodyne. Also a parachute the pack of which is attached to an aerostat or aerodyne, and opened by the freely falling body.

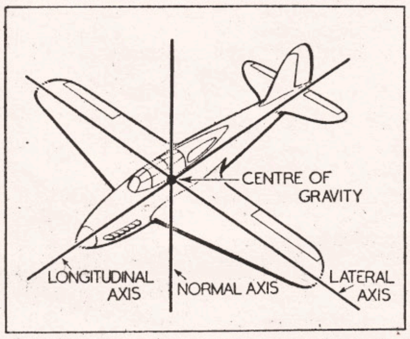
AUTOMATIC PILOT.—(More properly “Automatic control”).—An apparatus, operated by gyroscopes, which automatically moves the flying controls of an aeroplane to keep it on an even keel on a fixed course.

AUTOGIRO.—A trade name copyrighted by the Cierva Autogiro Company Ltd. for the gyroplanes made by that Company.

AUXILIARY FUEL TANK.—A tank in which a reserve supply of fuel is carried.

AVIATION.—The operation of all types of aircraft.

AXES.—Imaginary lines about which an aeroplane may change its attitude in flight. An aeroplane has three axes. They are:—



(i) LATERAL AXIS.—The straight line through the Centre of Gravity parallel to a line which would join the wing tips.

(ii) LONGITUDINAL AXIS.—The straight line through the Centre of Gravity parallel to a line which would join nose and tail.

(iii) NORMAL AXIS.—The straight line through the Centre of Gravity at right angles to the lateral axis and the longitudinal axis. When the aeroplane is flying so that the longitudinal axis and the lateral axis are horizontal the normal axis is vertical.

There are also the LIFT AXIS, the straight line through the Centre of Gravity perpendicular to the relative airstream, and the DRAG AXIS, the straight line through the Centre of Gravity parallel to the airstream.

AXIAL AERO-MOTOR.—An aero-motor in which the cylinders are arranged parallel to the airscrew shaft. No axial motors are at present in service.

AZIMUTH.—Used in aeronautics usually with respect to instruments to denote angular displacement in a horizontal plane. In astronomical navigation, azimuth is the true bearing of the star under observation from the North point of the horizon as seen by the observer.

The following additions are necessary to the “A” section of this Glossary:—

ACCESSORY GEARBOX.—A gearbox, usually attached to the back of an aero-motor, to transmit the drive of the engine to accessories such as instruments, electric generators, de-icing apparatus, undercarriage retracting mechanism, etc.

AIR BRAKE.—A device, usually in the form of a flap, designed to increase the drag of an aeroplane at will. Used to steepen the glide, shorten the approach and reduce the landing run.

(To be continued.)

THE OBSERVER CORPS CLUB

(FORMERLY THE HEARKERS' CLUB)

A copy of the Constitution of The OBSERVER CORPS CLUB is to be circulated to every Observer Corps Post in the country. The Aims and Objects of the Club and the terms of membership are set out below. We hope to publish an abridged version of the Constitution next week when it has been drawn up in its final legal form. It includes the first Officers and Council as duly elected.

Aims and Objects

THE AIMS AND OBJECTS of THE OBSERVER CORPS CLUB are:—

(1) To increase the efficiency of members of the Observer Corps in their duties.

(2) To provide for instruction and training in the work of the Corps and to hold competitions and tests.

(3) To provide means of social intercourse.

(4) To do such other things as may be incidental and conducive to the attainment of all or any of the aims and objects aforesaid.

The Club shall be non-sectarian and non-political.

Membership

The Club shall consist of:—

(1) Members and (2) Honorary Members.

All members of the Corps shall be *ipso facto* Honorary Members of the Club. Application for Membership or Honorary Membership shall be addressed to the Secretary of the appropriate Branch. Every Member and Honorary Member shall belong to a Branch. Ex-members of the Corps and other persons may be elected to membership of the Club at the discretion of the Council.

Every Member shall pay an annual subscription of 3s. 6d.

Honorary Members shall not be required to pay any subscription.

Any person shall upon ceasing to be a Member forfeit all right to and claim upon the Club and its property and funds.

DO'S AND DONT'S – *By the Honorary Secretary*

IN ORDER TO ENJOY the full advantage of membership of the Observer Corps Club, every Member should know just how much he may expect from the Club and what is equally important, just how much the Club expects from him. In other words—don't imagine that all you have to do is to join the Club, attend one meeting a month, and, hey-presto! at the end of six months you will be an expert in aircraft recognition. You won't. What then should you do?

1. You should subscribe to THE AEROPLANE SPOTTER—the official journal of the Club, and read it carefully in your own home.

2. Discuss any queries which may arise from your home study with other members at the Post. Exchange ideas on how *you* remember or " recognise " an aeroplane. No two people think alike and no two Members will obtain the same degree of advantage from the same form of instruction. If practicable arrange for Post Study Circles (many are already working) and bring any ideas developed at the Post to—

3. THE CLUB. This should be the medium of exchange of ideas. One meeting a month is not sufficient to develop a " course of instruction," but every meeting should sow the seeds of new ideas. Even if *you* fail to profit from any one particular meeting, don't assume that the other fellow hasn't benefited. Similarly an idea which is old to you may be new to someone else. All Branches should try to devote a time to " questions " and members should bring their problems to the Club. If you have difficulty in distinguishing between two aircraft, so may others. Therefore ask your fellow-members how they distinguish them and you will profit from the answers. There may be many answers to the same question, but one of those answers will appeal more readily to your type of mind than any other. Ideas exchanged at the Club, together with problems discussed, should be reported to the Editor of—

4. " THE AEROPLANE SPOTTER." He will then be able to deal with these points in The Bulletin, for the benefit of every Club in the country.

5. No Club meeting should be regarded as complete without a competition. This is the pleasant way of taking an examination, and don't be satisfied until you can score **31** out of **31** at *every* Third Grade Competition. This competition is based on aircraft which should be known to all Members. Don't be satisfied with obtaining one certificate. Look upon your certificate as a licence for one month and if, next month, you fail to score **25**, get down to a little more private study.

6. Remember you are hardly likely to see all of the machines you *should* know. The majority will probably remain just photographs or silhouettes. That is why " outside " speakers are invited to the Club. They should provide life and colour for machines which would otherwise remain just " pictures."

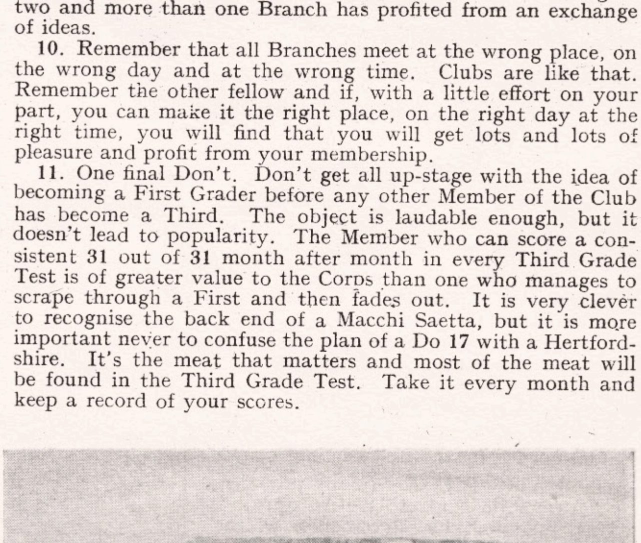
7. Silhouettes are used for all Club competitions because they show the positive points of recognition more clearly than any other form of illustration. Don't say:—" Oh, we never see an aeroplane like that." We have heard that one before. Your job is to know the *positive* points of recognition, so that when you see the machine in flight it is no longer guesswork. You should know it is this or that aeroplane, because only *that* particular aeroplane has *that* particular characteristic which makes your identification positive. And don't say:—" Oh, I know them all in flight, but I'm no good at silhouettes." We have heard that one before too and, like Queen Victoria, we are not amused. Either you know the *positive* points of recognition or you don't.

8. If you have any good " schemes " don't keep them all to yourself. We have seen some first-class charts at Liverpool which haven't been seen at Exeter, and we have seen a grand scheme at Exeter which hasn't been seen at Liverpool. See that your Club Secretary passes the idea forward to your Area Council. They will distribute to the Branches in the area and pass it forward to the General Council, who will distribute to all other areas. If you wish to " cash in " on an idea for recognition, pass your suggestion forward to the Honorary Organising Secretary of the Club without delay. He will put it to the General Council straightaway and, if they consider it worth while, they will put you in touch with likely publishers. If not, they will tell you why not. It may be that a very similar idea is already in the hands of the publishers or it may be that, from their national experience, they may be able to suggest a little improvement.

9. Invite Service guests to your meetings—A.A. Batteries, R.A.F. Units and the like. These lads also know a thing or two and more than one Branch has profited from an exchange of ideas.

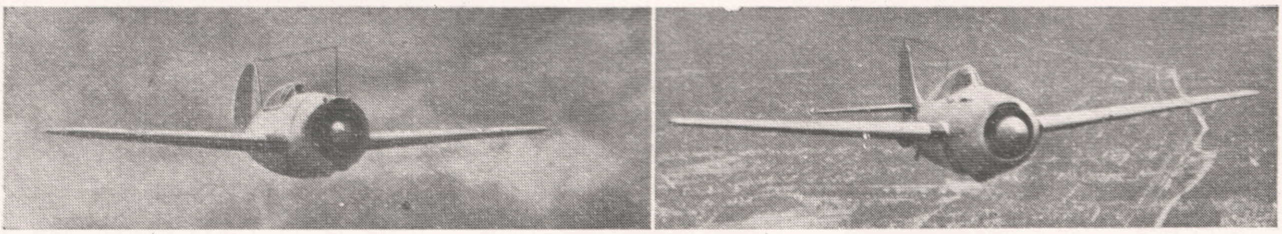
10. Remember that all Branches meet at the wrong place, on the wrong day and at the wrong time. Clubs are like that. Remember the other fellow and if, with a little effort on your part, you can make it the right place, on the right day at the right time, you will find that you will get lots and lots of pleasure and profit from your membership.

11. One final Don't. Don't get all up-stage with the idea of becoming a First Grader before any other Member of the Club has become a Third. The object is laudable enough, but it doesn't lead to popularity. The Member who can score a consistent **31** out of **31** month after month in every Third Grade Test is of greater value to the Corps than one who manages to scrape through a First and then fades out. It is very clever to recognise the back end of a Macchi Saetta, but it is more important never to confuse the plan of a Do 17 with a Hertfordshire. It's the meat that matters and most of the meat will be found in the Third Grade Test. Take it every month and keep a record of your scores.



COMING SHORTLY.—The Consolidated Liberator bomber which will be arriving in this country soon and will provide a new exercise for Observers The Davies wing with an aspect ratio of 11.5 should be distinctive.

THE OBSERVER CORPS CLUB



SIMILARITY—Identical views of the Brewster Buffalo (left) and the Grumman Martlet (right), two mid-wing fighters from America now on active service with the R.A.F.

BRANCH 1 (GUILDFORD)

Hon. Sec.: K. G. I. Scott, "Anlaby," West Clandon, Surrey. Phone, Clandon 135.

THE FIRST Annual General Meeting of the Club was held on Saturday, Jan. 25, at the New Technical College, Guildford.

The Chairman, Mr. H. J. Lowings, being unable to attend through illness, the Chair was taken by Mr. D. M. Edwardes. The Secretary read Mr. Lowings's report, explaining the new Constitution with the proposed change of name to THE OBSERVER CORPS CLUB.

The meeting endorsed the action of the Committee in negotiating with The Observer Corps, adopted the Constitution, and then proceeded to the election of officers for the ensuing year. The following offices were filled:—

CHAIRMAN: Mr. R. A. Saville-Sneath, X2.

HON. SECRETARY: Mr. K. G. I. Scott, V3.

HON. TREASURER: Mr. K. Robers, N3.

HON. COMPETITIONS OFFICER: Mr. C. H. Morice, L2.

HON. ATTENDANCE OFFICER: Mr. C. F. Andrews, N3.

The election of auditors was left until a future meeting.

The meeting expressed its thanks to the retiring officers and desired that its appreciation be conveyed to the retiring Chairman.

The Club was privileged to have amongst its guests the Deputy Commandant, Air Commodore H. le M. Brock, C.B., D.S.O., Group Captain H. L. Reilly, D.S.O., and Major-General Sir William Twiss, K.C.I.E., C.B., C.B.E., M.C., F.R.G.S. The President of the Club, Col. A. FitzGerald, O.B.E., sent apologies for his absence.

The Chairman then called upon Mr. P. G. Masefield, who was speaking to the Club for the fourth time, to give his talk on "The Evolution of the Fighter Aircraft from 1913 to 1941." As always, Mr. Masefield was informative and gained the close interest and appreciation of his audience.

The meeting closed with a Third Grade Recognition Test, the following Members qualifying:—

F. H. Smith	V2	F. A. Parker	N3
H. W. Sansom	R3	E. A. D. Watmough	A.G.O.

In addition, the following Members who are already 3rd, 2nd, or 1st Grade Hearkers, requalified to obtain their Observer Corps Club Certificates:—

E. C. Davies	X1	R. Dowdeswell	V3
C. F. Andrews	N3	A. C. Parker	V3
F. W. Gohery	L2	H. A. Rogers	L2
M. T. Wells	V2	D. Symington	V3
J. E. Boxall	V3	C. D. Brown	X1
K. F. R. Cable	L2	C. W. H. Carr	X1

THE next meeting will be on Feb. 22 at the Technical College, Guildford, at 14.30 hrs. and will deal with special business arising out of the new Constitution. Arrangements for the ordinary meeting at 15.00 hrs. include a new series of 10-minute talks entitled "Tips from the Posts," the first of which will be given by Mr. D. M. Edwardes of V 3.

The Secretary would like to receive the names of Members who, having qualified as 1st Grade Hearkers, are willing to give one of these informal talks to follow Members.

The Guest speaker is Mr. Leonard Taylor, who will talk on "The Air Training Corps."

A Third Grade Test will be followed by a Second Grade Test, which will count also as the first round of the First Grade Test.

BRANCH 3 (HENDON)

Hon. Sec.: A. Laws, 3, Elers Road, Ealing, W.13

WE HAVE started the New Year in grand style. At both our January meetings the attendance was greater than ever before and we have now nearly 100 Members.

The first meeting of the month was held at Watford Public Library, on Jan. 12. Mr. Bolton, our Centre Controller, with the help of Mr. Carter, a Watford Member, gave us an instructive chat on "Height Finding by Sound." Mr. Carter introduced and explained a gadget of his own invention now being used experimentally and Mr. Bolton stressed the importance of co-operation between Posts and Centre if best possible results are to be obtained.

Mr. Miller followed with one of his useful talks on "New Types." We were pleased to welcome Mr. Leonard Taylor again, who gave us a most interesting 45 minutes on "Record Breakers."

There was another rush of entries for the Third Grade Test. Messrs. Smith, Read and Dale tied with possibles, and our Competitions Officer was hard put to it to produce a sufficiently difficult problem picture. Three had to be shown before G. W. Dale of B3 proved himself the better man. Others who qualified for Third Class Hearkers are:—

(Centre) H. C. Dickman, R. L. Hodge; (B1) S. Williamson, A. Talmadge; (B3) R. Gerard, P. R. Chesher; (C1) D. C. Brinkley, A. W. Warren, P. C. Austin, J. A. Vernon; (C2) J. F. Crone; (C3) C. S. Lavers; (D2) L. Chalmers, G. S. P. Monger; (F1) L. S. D. Loveday, S. V. Burgess; (G1) G. A. Large, G. C. Holmes, G. H. Laird, L. E. Latham; (L1) F. Kent, E. Cleaver; (L2) H. J. Preston.

Another meeting was held at Hendon Public Library on Jan. 26. The high spot was the Inter Post Contest on Aircraft Recognition. Our O.G.Os., having very generously provided a silver cup for award to the winning team, our Competitions Officer invited all Posts to enter a team of four and recognise 50 flying views of aircraft in silhouette and photograph. Eleven Posts entered teams and competition was keen.

While the papers were being marked, Mr. B. E. A. Vigers of L2 kindly read a paper by J. H. Stevens, Jnr., on "The Aeroplane as a Family" with many interesting slides.

The results of the Inter Post Contest were that G1, represented by Messrs. Ashby, Oldham, Orme and West, were easily ahead with 185 points. B3 and D2 each with 179 points being second. We were all sorry that our O.G.O., Capt. Sworder, R.N., was unable to be with us and make the presentation, but the senior A.O.G.O., Mr. L. V. Owers, deputised and G1 departed as happy as a dog with many tails.

We hope to hold the contest every three months and the Committee look forward to all Posts within the Group getting together a team and "having a go."

THIRD GRADE TEST.—J. K. Rodgman of B3 obtained a possible, the following qualifying with 25 points and over:—

(A.O.G.O.) G. A. D. Bourne; (Centre) S. Brown; (C1) R. J. Lane, F. C. Moss, A. E. Paddon; (C3) G. M. Hall; (D2) D. G. Browne, E. Coatsworth, P. G. E. Dawson, W. McIntyre; (E3) A. G. W. Jarrett, R. E. Price; (G1) G. Weston; (G2) R. G. Staples; (J1) L. A. Clouting.

We cannot end this report without expressing our deep appreciation to our O.G.Os. for so generously providing such a handsome trophy for the Inter Post Contest. It will undoubtedly do much towards stimulating keen competition between Posts and result in a more enthusiastic study of practical identification.

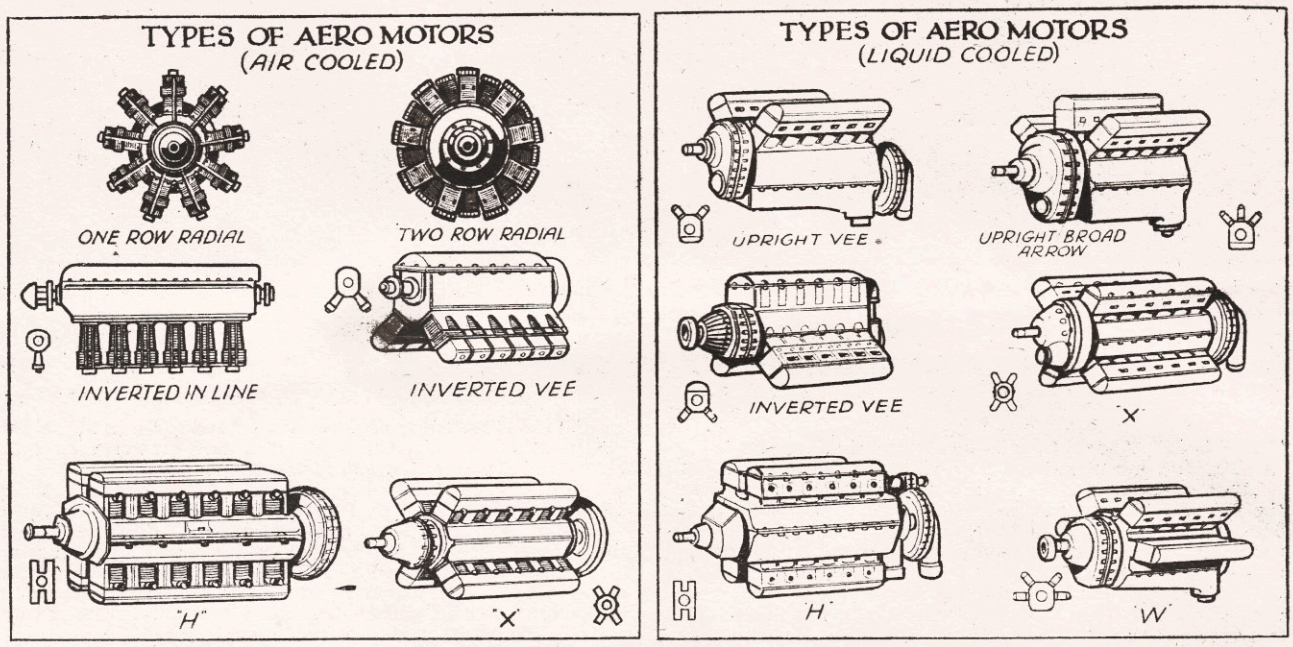
FORTHCOMING EVENTS

Feb. 9.—Shirley.—O.C.C. Branch 2 (Shirley).—Talk by R. A. Saville-Sneath on "More About Clouds." Second Grade Test.—10.00 hrs.

Feb. 9.—Bishops Stortford.—O.C.C. Branch 3 (Hendon).—Talk by Peter Masefield on "The Evolution of the Single-seat Fighter 1913-1941" and J. G. M. Miller on "New Types of Aeroplanes in the R.A.F.," at the Falcon Hotel.—10.00 hrs.

Feb. 22.—Guildford.—O.C.C. Branch 1 (Guildford).—Meeting on new Constitution.—Talk by D. M. Edwardes on "Tips From the Posts," at the Technical College, Guildford.—14.30 hrs.

BY THESE NAMES SHALL YE KNOW THEM



TYPES OF AERO MOTOR.—All the various types of aero-motor at present in use are included in the above drawing. Each motor is shown as it is without its cowling. The drawing shows how each is described by the arrangement of its cylinders.

A SPOTTERS' CLUB

SPOTTERS' CLUB No. 1 (Southend-on-Sea) has been formed by keen Spotters trained under the auspices of the Air Raid Precautions Department of Southend. The new Club is founded on the same general principle as the Hearkers' Club which is limited to members of the Observer Corps.

The Spotters' Club has as its object the promotion of efficiency of roof watches. Lectures and tests will be held on the lines of the Hearkers' Clubs.

We welcome such initiative, which is the chief basis on which real proficiency can be founded.

The following officers were elected to Spotters' Club No. 1:—

PRESIDENT: G. H. Fender.

JOINT HON. SECRETARIES: H. P. Liberty, R. W. Garrard.

HON. TREASURER: A. W. Balls.

HON. COMPETITION ORGANISER: L. Bryce.

The headquarters of the Club are at 21a, Crowstone Road, Westcliff-on-Sea.

AEROPLANES IN DETAIL

BECAUSE of the space which we must devote this week to the new constitution of THE OBSERVER CORPS CLUB, the page of "Aeroplanes in Detail" has had to be held over this week.

Mental Aerobatics—VI

A WAS on patrol at 30,000 feet, when a cannon shell exploded in the port wing and damaged four guns.

In another combat B dived at an angle of 70 degrees, released the bomb load, turned his divebrakes and flattened out.

C swivelled the turret to meet the enemy. Behind his back the gunner in the starboard hatch opened fire on another attacking aeroplane. C waited until the fighter flown by D was within 200 yards, then gave him a long burst with all four guns.

D then fell away with smoke pouring from the port motor, and both rudders locked. When B landed he saw that a shell burst had torn away part of the starboard spat.

E came in to make a second attack on A. He tried a long shot and succeeded in damaging the radiator under the starboard wing. As E turned again a bullet pierced one tyre of the retracted undercarriage and wounded him in the foot.

What aeroplanes were A, B, C, D and E flying?

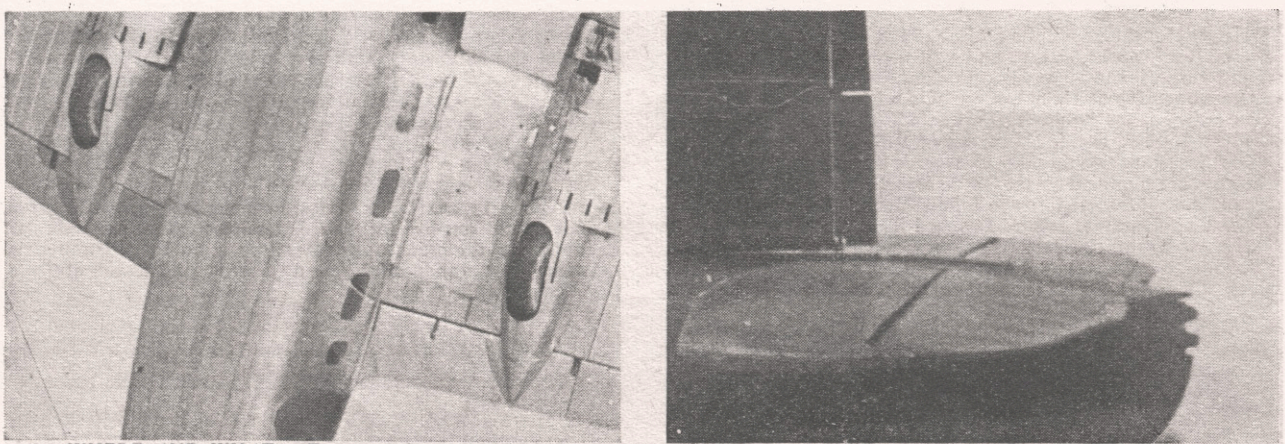
Solution to Mental Aerobatics—V

GRIFFITHS flew a Lysander; Priestley an He 111K Mk. V; Spencer a Miles Master; Stuart a Ju 88. By a misprint the difference between the top speed of Priestley's and Griffiths' aeroplane was given as 17 m.p.h. less than the minimum speed of Griffiths' aeroplane instead of 11 m.p.h.

Answer to Last Week's Crossword

Across:—2, Anson. 5, Ore. 7, Ed. 8, Wes. 11, Tornado. 13, GP. 14, Aloof. 15, Ego. 16, Proof. 19, Lex. 20, Abet. 23, A.T.A. 26, Owe. 27, Manchester. 29, Pre. 30, OH. 31, Stukas.

Down:—1, Rota. 2, Aeroplane. 3, Seafox. 4, Odd. 9, Egg. 10, SPOTTER. 12, Nore. 17, F.A. 18, Ramp. 21, Botha. 22. EWE. 24, Tare. 25, Jehu. 28, Hot.



WHERE AND WHAT?—Two more posers to test detailed knowledge. The problems last week were (left) the rear step and tailplane of a Short Empire flying-boat; (right) the nose of a Bristol Bombay.

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